

## WE CLAIM:

*Sub B17*

1. A process for forming a Caribbean steel pan consisting essentially of:
  - (a) determining the shape and dimensions of a selected Caribbean steel pan or determining an average shape and dimensions of more than one selected Caribbean steel pan;
  - (b) creating a compilation of topographic data of the shape and dimensions of the pan or pans;
  - (c) using the resulting compilation to form a mold to substantially replicate the surface of the selected steel pan or pans; *(the shape and dimensions of a single pan or the average shape & dimensions of >1 selected C-steel pan)*
  - (d) incorporating the mold into a hydroforming press;
  - (e) pressing a sheet metal disk having a desired diameter and a substantially uniform thickness in the hydroforming press to form a steel pan head having a plurality of individual raised convex note producing shapes formed therein, which produce a resonant sound when struck by a mallet;
  - (f) heat treating the steel pan head;
  - (g) trimming the outer edge of the steel pan head; and
  - (h) attaching a side skirt to the pan head to form a Caribbean steel pan.
2. A process of Claim 1 wherein the steel pan head is rough tuned after heat treatment.
3. A process of Claim 2 wherein the steel pan head is fine tuned after a skirt has been attached.
4. A process of Claim 1 wherein the steel pan head is rough tuned after heat treatment and fine tuned after a skirt has been attached.
5. A process of Claim 1 wherein the shape and dimensions of the steel pan are determined by at least one means selected from the group consisting of laser interferometry, a piezo electric transducer, and a variable reluctance probe transducer.
6. A process of Claim 5 wherein the shape and dimensions of the steel pan are determined by a piezo electric transducer.
7. A process of Claim 5 wherein the shape and dimensions of the top or playing surface of the steel pan are determined.
8. A process of Claim 1 wherein a male mold is formed.

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9. A process of Claim 1 wherein the side skirt is attached to the pan head by welding.
10. A process of Claim 1 wherein the side skirt is attached to the pan head by clamping.
- 5 11. A process of Claim 10 wherein the skirt is detachable from the pan head.
12. A process of Claim 1 wherein the metal disc consists essentially of steel.
13. A process of Claim 1 wherein the metal disc is prepared from metal selected from the group consisting of bronze, aluminum, titanium and stainless steel alloys.
- 10 14. A Caribbean steel pan resulting from the process of Claim 1.

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